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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/929,577	08/14/2001	Michael Ehlers	655.00963	9151

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04/10/2003

WOOD, PHILLIPS, VAN SANTEN, CLARK & MORTIMER
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CHICAGO, IL 60661

EXAMINER

FORD, JOHN K

ART UNIT

PAPER NUMBER

3743

DATE MAILED: 04/10/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/929,577

Applicant(s)

Ehlers et al.

Examiner

FORD

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/19/02
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9, 11 and 13-18 is/are pending in the application.
- 4a) Of the above claim(s) 14, 16 and 17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9, 11, 13, 15 and 18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 18) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other:

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Applicant's election of the species of Figures 1-8 is acknowledged. Applicant discusses some of the differences between the different Figures (1-12), but apparently has elected the first species of Figures 1-8, without traverse. Claims 9, 11, 13, 15 and 18 are deemed, by applicant, to be readable on the elected species. Accordingly, claims 14, 16 and 17 are withdrawn from consideration. Regarding the "no burden" argument, it is unpersuasive given the limited time allotted for examination. The election of species requirement is deemed proper and made final. An action on the merits follows as to claims 9, 11, 13, 15 and 18.

Applicants, through counsel, have stated no translations will be provided. The Examiner has noted already that applicants have made representations about this prior art that cannot be fairly deduced without knowledge and understanding found only in their underlying written disclosures. While the Examiner acknowledges translation facilities within the PTO, there is simply no precedent for what counsel is asking the Examiner to do (i.e. procure translations of relevant references that are of applicant's own origin). The lead times necessary to obtain complete translations are typically longer than the turn-around times allotted for Examiners to process amended applications, as is the case here. Again, counsel is requested to provide complete translations so that the Examiner can meaningfully consider the foreign patent publication that counsel has cited for consideration. Procuring such translations, even machine translations, would greatly aid the Examiner in providing applicant with an orderly and considered prosecution. Based on knowledge and belief, at least some of these references have already been translated for other applications related to this one.

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 13 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over JP 8-136176.

See Figure 16(d), Figure 3 and Figure 8. These Figures, taken together, illustrate inlet and outlet connectors 2g and 2h to the inlet and outlet headers, a detail of the heat exchanger core and a tube detail showing a flat tube, respectively, and fairly teach the subject matter of claim 13. The inlet and outlet connectors are in line with the flat tubes of the heat exchanger core from where they connect to the respective header until they reach an "elbow" portion.

Claims 13, 15 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 8-136176 in view of DE 19527050 or Le Gauyer (USP 5,275,236).

Rectangular connecting pipes, as opposed to connecting structures 2g and 2h of unknown shape in the prior art of JP 8-136176, would have been obvious to use where the external piping was a rectangular configuration as appears to be shown in DE '050. Similarly, Le Gauyer teaches a rectangular connector in col. 3, lines 54-56.

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To have used a straight piece of rectangular piping as taught by DE '050 or the rectangular section pipe of Le Gauyer in the prior art of JP 8-136176 in place of connecting pipes 2g and 2h to facilitate connection to rectangular external supply and return piping (in the case of DE '050) or to improve the joint between the external pipe and the header (in the case of Le Gauyer) would have been obvious to one of ordinary skill in the art.

Claims 13, 15 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 8-136176 in view of JP 3-79994 or JP 6-273088.

JP '176 has been explained above. JP '994 and JP '088 each show a rectangular connector 8 and 22, respectively, which would have been obvious to use in place of both of connectors 2g and 2h in Figure 16(d) of JP '176 to advantageously employ a relatively strong block joint in place of connectors 2g and 2h of JP '176.

Claims 9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP '176 as applied to claim 13 above, and further in view of Bentz and DE 19724728 (supplied by applicant without translation)

Bentz shows a radial flow fan, a plurality of heat exchangers 41, 42 and 47 (Fig. 4) around the fan. No details of the heat exchangers or their connections are shown.

DE '728 teaches orienting headers 16 and 17 parallel to the axis of the fan 5, with flat tubes 7 perpendicular to the headers from front to back.

The prior art JP '176 teaches a connector as claimed in Figure 16(d).

To have used the Figure 16(d) heat exchanger of JP '176 in the Bentz system in place of any or all of heat exchangers 41, 42 and 47 would have been obvious, orienting

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the tubes and headers relative to the fan in the manner taught by DE '728, for the purpose of improving heat exchanger, and facilitating connection to piping transporting fluids to and from the various heat exchangers.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art as applied to claims 9 and 11 above, and further in view of Rudny et al.

Rudny et al. (Figs. 1 & 2) show that connections at both the front end and rear end of a fan shroud/heat exchanger (with three independent circuits) are known in the art. As shown in Figure 1 of Rudny this permits connections to be made easily without excessive interference, thereby reinforcing the above combination of Bentz, DE '728 and JP '176.

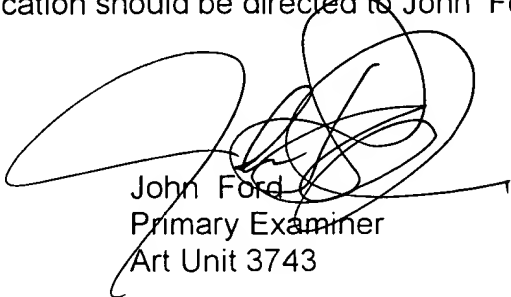
Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication should be directed to John Ford at telephone number 703-308-2636.



John Ford
Primary Examiner
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John K. Ford
Primary Examiner